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* V.D.M. PART NO. 92L0107-005D

RELEASED 02-18-71

620 TELETYPE TEST PROGRAM

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THIS TEST PROGRAM IS A PART OF THE SIX TWENTY
TEST EXECUTIVE PROGRAM SYSTEM (STEPSE)

THE TTY TEST IS DESIGNED TO PROVIDE A SET OF ROUTINES
TO TEST THE OPERATIONAL STATUS OF THE TELETYPE UNIT. THE PROGRAM
IS APPLICABLE TO VDM-MODIFIED TELETYPE MODELS 33 ASR, 35 ASR,
AND 35 KSR.

0001
0002
0003
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0005
0006
0007
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0009
CCCC100010
CCCC200011
CCCC300012
CCCC400013
CCCC500014
CCCC600015
CCCC700016
CCCC800017
CCCC900018
CCC1000019
CCC1100020
CCC1200021
CCC1300022
CCC1400023
CCC1500024
CCC1600025
CCC1700026
CCC1800027
CCC1900028
CCC2000029
CCC2100030
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 CCC6900078
 CCC7000079
 CCC7100080
 CCC7200081
 CCC7300082

* AREAS RESERVED BY EXECUTIVE *

CRG 0

JMP EXECUTIVE

CRG 040

JMPM POWER DOWN ROUTINE

JMP POWER UP ROUTINE

NOTE: THE TEST EXECUTIVE ALSO RESERVES LOCATIONS 0400 TO 0477
 FOR A POINTER TABLE TO STANDARD ROUTINES, AND AS AN AREA
 FOR EXECUTIVE DATA. ALL TEST PROGRAMS WORKING WITH THE
 EXECUTIVE MUST PRESERVE THIS BLOCK.
 STANDARD ROUTINES WILL BE CALLED INDIRECTLY THRU
 THIS TABLE

000400 OU1C .SET .0400 (OUTA)
 000403 OUMG .SET .0403 (OUTD)
 000416 IOCT .SET .0416 (INPG)

000500 .CRG .0500

000500 006010 TKCP .LDIAI .0224 PNCH OFF

000501 000224

000502 002000

000503 100400

000504 006010 .LDIAI .0223 RDR OFF

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000505	000223				CCC7400083	
000506	002000	•CALL*	•OU1C			
000507	100400				CCC7500084	
000510	006010	•LDIAI	•0201	PRINT ENABLE		
000511	000201				CCC7600085	
000512	002000	•CALL*	•OU1C			
000513	100400				CCC7700086	
000514	006030	TTPI	•LDXI	•HDG1	TAPE LOADED	
000515	000675 R		•CALL*	•OUMG		CCC7800087
000516	002000					
000517	100403				CCC7900088	
000520	006030	TRDA	•LDXI	•HDG2	DA=?	
000521	000716 R		•CALL*	•OUMG		CCC8000089
000522	002000					
000523	100403				CCC8100090	
000524	002000	TIDA	•CALL*	•IOCT	INPUT DA END WITH PERIOD	
000525	100416				CCC8200091	
000526	001000		•JMP	•TSSR	RESET SSJ	
000527	000655 R				CCC8300092	
000530	001000		•JMP	•TRDA	BACKSLASH	
000531	000520 R		•JMP	•*+2		CCC8400093
000532	001000					
000533	000534 R	* NORMAL RETURN FROM INPG			CCC8500094	
000534	006030		•LDXI	•STTY	CCC8600095	
000535	002644 R				CCC8700096	
000536	055000		•STA	•0..1	STORE DA	
000537	006010	TATT	•LDIAI	•0207	RING BELL ON APPROPRIATE TTY	CCC8800097
000540	000207		•CALL	•OUTA	AND INITIALIZE APPROPRIATE TTY	
000541	002000				CCC8900098	
000542	002613 R		•LDIAI	•0224	PNCH OFF	
000543	006010		•CALL	•OUTA		CCC9000099
000544	000224					
000545	002000		•CALL	•OUTA	CCC9100100	
000546	002613 R		•LDIAI	•0223	RDR OFF	
000547	006010		•CALL	•OUTA	CCC9200101	
000550	000223				CCC9300102	
000551	002000		•CALL	•OUTA		
000552	002613 R		•LDIAI	•0201	PRINT ENABLE	CCC9400103
000553	006010		•CALL	•OUTA		
000554	000201				CCC9500104	
000555	002000					

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000556	002613 R					CC09600105
000557	002000	.CALL	.OUTC	CR/LF		
000560	003210 R					
000561	012644	.LDA	.STTY			CC09700106
000562	006110	.CRAI	.0102500			CC09800107
000563	102500					
000564	050565	.STA	.**+1			CC09900108
000565	102500	.CIA	.0	CLEAR TTY INPUT BUFFER		CC10000109
000566	006030	TRID	.LEXI	.HDG3	TEST ID=?	CC10100110
000567	000726 R		.CALL	.OUTD		CC10200111
000570	002000					
000571	003243 R					
000572	002000	TIID	.CALL	.INPE	INPUT ID END WITH PERIOD	CC10300112
000573	003007 R		.JMP	.TRSS	RESET SS3	CC10400113
000574	001000					
000575	000665 R		.JMP	.TRID	BACKSLASH	CC10500114
000576	001000		.JMP	.TRID		
000577	000566 R					CC10600115
000600	001000		.JMP	.TRID	BACKARROW	
000601	000566 R					
		*NORMAL RETURN FROM INPE				
000602	051010		.STA	.STID	STORE ID	CC10700116
000603	002000		.CALL	.INPF	> OR .	CC10800117
000604	003047 R		.JMP	.TATT	EXIT TO KEYBOARD CONTROL PROGRAM	CC10900118
000605	001000					CC11000119
000606	000537 R		.JMP	.TRID	BACKSLASH	CC11100120
000607	001000		.JMP	.TRID		
000610	000566 R					CC11200121
000611	001000		.JMP	.TRID	BACKARROW	
000612	000566 R					
000613	001000		.JMP	.**+2	>	CC11300122
000614	000615 R					
		* NORMAL RETURN FROM INPF				
000615	002000		.CALL	.OUTC		CC11400123
000616	003210 R					CC11500124
000617	011010		.LDA	.STID	RESTORE ID	CC11600125
000620	141002		.SUB	.KC	KEYBD CHAR	CC11700126
000621	001010		.JAZ	.TKCT		CC11800127
000622	001011 R		.LDA	.STID		CC11900128
000623	011010		.SUB	.KE	KEYBD ECHO	CC12000129
000624	141003		.JAZ	.TKET		CC12100130
000625	001010					

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000626	001233 R					CC12200131
000627	011010	,LDA	,STID			CC12300132
000630	141004	,SUB	,PR	PNCH/RDR		CC12400133
000631	001010	,JAZ	,TPRT			
000632	001445 R					CC12500134
000633	011010	,LDA	,STID			CC12600135
000634	141005	,SUB	,PS	PRINT SUPPRESSION		CC12700136
000635	001010	,JAZ	,TPST			
000636	001326 R					CC12800137
000637	011010	,LDA	,STID			CC12900138
000640	141006	,SUB	,PT	PRINTER		CC13000139
000641	001010	,JAZ	,PTTT			
000642	001261 R					CC13100140
000643	011010	,LDA	,STID			CC13200141
000644	141007	,SUB	,RT	RDR		CC13300142
000645	001010	,JAZ	,TRTT			
000646	002120 R					CC13400143
000647	006030	,LDXI	,HDG4	INVALID TEST ID		
000650	000743 R					CC13500144
000651	002000	,CALL	,OUTD			
000652	003243 R					CC13600145
000653	001000	,JMP	,TRID			
000654	000566 R					CC13700146
000655	006030 TSSR	,LDXI	,HDG5	RESET SSJ		
000656	000762 R					CC13800147
000657	002000	,CALL*	,OUMG			
000660	100403					CC13900148
000661	001400	,JSS3	,*			
000662	000661 R					CC14000149
000663	001000	,JMP	,TRDA			
000664	000520 R					CC14100150
000665	006030 TRSS	,LDXI	,HDG5	RESET SSJ		
000666	000762 R					CC14200151
000667	002000	,CALL*	,OUMG			
000670	100403					CC14300152
000671	001400	,JSS3	,*			
000672	000671 R					CC14400153
000673	001000	,JMP	,TRID			
000674	000566 R					CC14500154
	*	MESSAGE TABLE				
000675	106612 HDG1	,DATA	,0106612, 'THE TELETYPE TEST IS LOADED', 0106612, 0			CC14600155
000676	152310					

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000677	142640	
000700	152305	
000701	146305	
000702	152331	
000703	150305	
000704	120324	
000705	142723	
000706	152240	
000707	144723	
000710	120314	
000711	147701	
000712	142305	
000713	142240	
000714	106612	
000715	000000	
000716	106612	,DATA ,0106612, *TELETYPE DA=*,0
000717	152305	
000720	146305	
000721	152331	
000722	150305	
000723	120304	
000724	140675	
000725	000000	
000726	106612	,DATA ,0106612, *TTY TEST IDENTIFIER =*,C
000727	152324	
000730	154640	
000731	152305	
000732	151724	
000733	120311	
000734	142305	
000735	147324	
000736	144706	
000737	144705	
000740	151240	
000741	136640	
000742	000000	
000743	106612	,DATA ,0106612, *INVALID TEST IDENTIFIER*,0106612,0
000744	144716	
000745	153301	
000746	146311	
000747	142240	
000750	152305	

CC14700156

CC14800157

CC14900158

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000751 151724
000752 120311
000753 142305
000754 147324
000755 144706
000756 144705
000757 151240
000760 106612
000761 000000
000762 106612 HDG5 ,DATA ,0106612,*PLEASE RESET SENSE SWITCH 3*,0

CC15000159

000763 150314
000764 142701
000765 151705
000766 120322
000767 142723
000770 142724
000771 120323
000772 142716
000773 151705
000774 120323
000775 153711
000776 152303
000777 144240
001000 131640
001001 000000

* DATA TABLE
001002 145703 KC ,DATA ,0145703
001003 145705 KE ,DATA ,0145705
001004 150322 PR ,DATA ,0150322
001005 150323 PS ,DATA ,0150323
001006 150324 PT ,DATA ,0150324
001007 151324 RT ,DATA ,0151324
001010 000000 STID ,DATA ,0

CC15100160
CC15200161
CC15300162
CC15400163
CC15500164
CC15600165
CC15700166
CC15800167
CC16000168

* TELETYPE KEYBOARD CHARACTER TEST

*
001011 002000 TKCT ,CALL ,OUTC

CC16100169
CC16200170
CC16300171

001012 003210 R
001013 006030
001014 001126 R
001015 002000
001016 003243 R

,LXI ,TKK1 PRINT L/C CHAR LINE
,CALL ,OUTD

CC16400172
CC16500173

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001017	006030	•LDXI	•TKK1	FIRST L/C CHAR	CC16600174	
001020	001126 R	•LDBI	•42	#L/C CHAR	CC16700175	
001021	006020	•LDBI	•42	#L/C CHAR	CC16800176	
001022	000052					
001023	002000	TKC2	•CALL	•TCS1	INPUT CHAR SUBR	CC16900177
001024	001071 R	TKC3	•LDA	•TKW2	ERROR CHAR	CC17000178
001025	011232	TKC3	•LDA	•TKW2	ERROR CHAR	CC17100179
001026	001000	•JMP	•*+3			
001027	001031 R					
001030	011231	•LDA	•TKW1	VALID CHAR	CC17200180	
001031	002000	•CALL	•OUTA	PRINT CHAR		
001032	002613 R					
001033	005144	•IXR	•		CC17300181	
001034	005322	•DBR	•		CC17400182	
001035	001020	•JBZ	•TKC4	LAST CHAR INPUT?	CC17500183	
001036	001041 R					
001037	001000	•JMP	•TKC2	NOT LAST	CC17600184	
001040	001023 R					
001041	002000	TKC4	•CALL	•OUTC	CC17700185	
001042	003210 R					
001043	006030	•LDXI	•TKK2	PRINT U/C CHAR LINE	CC17800186	
001044	001202 R					
001045	002000	•CALL	•OUTD		CC17900187	
001046	003243 R					
001047	006030	•LDXI	•TKK2	FIRST U/C CHAR	CC18000188	
001050	001202 R					
001051	006020	•LDBI	•21	# U/C CHAR	CC18100189	
001052	000025					
001053	002000	TKC5	•CALL	•TCS1	INPUT CHAR SUBR	CC18200190
001054	001071 R					
001055	011232	TKC6	•LDA	•TKW2	ERROR CHAR	CC18300191
001056	001000	•JMP	•*+3		CC18400192	
001057	001061 R					
001060	011231	•LDA	•TKW1	VALID CHAR	CC18500193	
001061	002000	•CALL	•OUTA	PRINT CHAR	CC18600194	
001062	002613 R					
001063	005144	•IXR	•		CC18700195	
001064	005322	•DBR	•		CC18800196	
001065	001020	•JBZ	•TKC7	LAST CHAR INPUT?	CC18900197	
001066	001011 R					
001067	001000	•JMP	•TKC5	NOT LAST	CC19000198	
001070	001053 R					

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		* INPUT CHARACTER SUBROUTINE	CC19100199
001071	000000	TCS1 .ENTR *	CC19200200
001072	015000	.LDA ,0,1	CC19300201
001073	051231	.STA ,TKW1	CC19400202
001074	002000	.CALL ,INPA	CC19500203
001075	002610 R		
001076	001000	.JMP ,TATT	CC19600204
001077	000537 R		
		* NORMAL RETURN FROM INPA	CC19700205
001100	006140	.SUBI ,0240	CC19800206
001101	000240		
001102	001010	.JAZ* ,TCS1	CC19900207
001103	101071 R		
001104	006120	.ACDI ,0240	CC20000208
001105	000240		
001106	131231	.ERA ,TKW1	CC20100209
001107	001010	.JAZ ,CS01	CC20200210
001110	001121 R		
001111	131231	.ERA ,TKW1	CC20300211
001112	051232	.STA ,TKW2	CC20400212
001113	006010	.LDAI ,0207	CC20500213
001114	000207		
001115	002000	.CALL ,OUTA	CC20600214
001116	002613 R		
001117	001000	.JMP ,TCS1+3	CC20700215
001120	001074 R		
001121	041071	CS01 .INR ,TCS1	CC20800216
001122	041071	.INR ,TCS1	CC20900217
001123	041071	.INR ,TCS1	CC21000218
001124	001000	.JMP* ,TCS1	CC21100219
001125	101071 R		
		* DATA TABLE	CC21200220
001126	000261	TKK1 ,DATA ,0261,0262,0263,0264,0265,0266,0267,0270,0271,0260	21300221
001127	000262		
001130	000263		
001131	000264		
001132	000265		
001133	000266		
001134	000267		
001135	000270		
001136	000271		
001137	000260		

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001140	000272	,DATA ,0272,0255,0321,0327,0305,0322,0324,0331,0325,0311	21400222
001141	000255		
001142	000321		
001143	000327		
001144	000305		
001145	000322		
001146	000324		
001147	000331		
001150	000325		
001151	000311		
001152	000317	,DATA ,0317,0320,0301,0323,0304,0306,0307,0310,0312,0313	21500223
001153	000320		
001154	000301		
001155	000323		
001156	000304		
001157	000306		
001160	000307		
001161	000310		
001162	000312		
001163	000313		
001164	000314	,DATA ,0314,0273,0332,0330,0303,0326,0302,0316,0315,0254	21600224
001165	000273		
001166	000332		
001167	000330		
001170	000303		
001171	000326		
001172	000302		
001173	000316		
001174	000315		
001175	000254		
001176	000256	,DATA ,0256,0257,0106612,0	21650225
001177	000257		
001200	106612		
001201	000000		
001202	000241	TKK2 ,DATA ,0241,0242,0243,0244,0245,0246,0247,0250,0251,0252	21700226
001203	000242		
001204	000243		
001205	000244		
001206	000245		
001207	000246		
001210	000247		
001211	000250		

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001212	000251			
001213	000252			
001214	000275	,DATA ,0275,0337,0300,0333,0334,0253,0336,0335,0271,0276		21750227
001215	000337			
001216	000300			
001217	000333			
001220	000334			
001221	000253			
001222	000336			
001223	000335			
001224	000274			
001225	000276			
001226	000277	,DATA ,0277,0106612,0		21800228
001227	106612			
001230	000000			
001231	TKW1	,BSS ,1	TEMP STOR INPUT CHAR	CC21900229
001232	TKW2	,BSS ,1	TEMP STOR INVALID CHAR	CC22000230
	*			CC22200231
	*	KEYBOARD ECHO TEST		CC22300232
	*			CC22400233
001233	006030	TKET ,LDXI ,HDG6	KYBD ECHO TEST	CC22500234
001234	001245 R			
001235	002000	,CALL ,OUTD		CC22600235
001236	003243 R			
001237	002000	,CALL ,INPB	INPUT & PRINT CHAR	CC22700236
001240	002656 R			
001241	001000	,JMP ,TATT	EXIT TO KEYBOARD CCNTRL PROGRAM	CC22800237
001242	000537 R			
	*	NORMAL RETURN FROM INPB		CC22900238
001243	001000	,JMP ,**4		CC23000239
001244	001237 R			
001245	106612	HDG6 ,DATA ,0106612,'KEYBOARD ECHO TEST',0106612,0		CC23100240
001246	145705			
001247	154702			
001250	147701			
001251	151304			
001252	120305			
001253	141710			
001254	147640			
001255	152305			
001256	151724			
001257	106612			

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001260 000000

	*			CC23300241			
	*	PRINTER TEST		CC23400242			
	*			CC23500243			
001261	006010	TPTT	.LDAI .0237	INITIALIZE	CC23600244		
001262	000237						
001263	051325		.STA .TPW1	FIRST CHAR (-1)	CC23700245		
001264	006030	TPT1	.LDXI .72	INIT FOR NEW LINE	CC23800246		
001265	000110						
001266	002000		.CALL .OUTC	CR/LF	CC23900247		
001267	003210 R						
001270	011325		.LDA .TPW1	FIRST CHAR OF PREVIOUS LINE	CC24000248		
001271	002000		.CALL .TPT3	SUBR	CC24100249		
001272	001307 R		.STA .TPW1	FIRST CHAR OF NEW LINE	CC24200250		
001273	051325		.CALL .OUTA	PRINT CHAR	CC24300251		
001274	002000	TPT2	.JSS3 .TATT	EXIT TO KEYBOARD CONTROL PROGRAM	CC24400252		
001275	002613 R						
001276	001400		.CALL .TPT3	NEXT CHAR	CC24500253		
001277	000537 R						
001300	002000		.CALL .TPT3				
001301	001307 R		.DXR		CC24600254		
001302	005344		.JXZ		CC24700255		
001303	001040		.TPT1	END OF LINE ?			
001304	001264 R						
001305	001000		.JMP	.TPT2	NO	CC24800256	
001306	001274 R						
	*	INCREMENT CHARACTER SUBROUTINE			CC24900257		
001307	000000	TPT3	.ENTR	.	CC25000258		
001310	005111		.IAR	.	CC25100259		
001311	006130		.ERAII	.0340	CC25200260		
001312	000340						
001313	001010		.JAZ	.**+6	LAST CHAR OF SET ?	CC25300261	
001314	001321 R						
001315	006130		.ERAII	.0340	NO - RESTORE CHAR	CC25400262	
001316	000340						
001317	001000		.JMP*	.TPT3	CC25500263		
001320	101307 R		.LDAI	.0240	SET TO FIRST CHAR OF SET	CC25600264	
001321	006010						
001322	000240		.JMP*	.TPT3	RETURN	CC25700265	
001323	001000						
001324	101307 R		.TPW1	.ESS	.1	WORK AREA	CC25800266

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*
* PRINT SUPPRESSION TEST
*
* IF ANY FAILURES OCCUR *'S WILL APPEAR WITHIN
* THE MESSAGE
*
001326 006030 TPST .LDXI *(PSTBL) TABLE POINTER CC26000267
001327 001345 R
001330 015000 PS20 .LDA ,0,1 PICK A PAIR CC26700274
001331 002000 .CALL .OUTA
001332 002613 R
001333 004350 .LSRA ,8
001334 002000 .CALL .OUTA CC26800275
001335 002613 R
001336 001400 .JSS3 .TATT EXIT TO KEYBOARD CCNTRCL PROGRAM CC27100278
001337 000537 R
001340 005144 .IXR ,
001341 001010 .JAZ .TPST CC27200279
001342 001326 R
001343 001000 .JMP .PS20 CC27300280
001344 001330 R
001345 105215 PSTBL .DATA ,CRLF,0102301,STAR,0102323,STAR CC27500282
001346 102301
001347 100452
001350 102323
001351 100452
001352 102322 .DATA ,0102322,STAR,0102240,STAR,0102324,STAR CC27600283
001353 100452
001354 102240
001355 100452
001356 102324
001357 100452
001360 102324
001361 100452 .DATA ,STAR,0102331,STAR,0102240,STAR CC27700284
001362 102331
001363 100452
001364 102240
001365 100452
001366 102320 .DATA ,0102320,STAR,0102322,STAR,0102311 CC27800285
001367 100452
001370 102322
001371 100452

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001372	102311		
001373	100452	,DATA ,STAR,0102316,STAR,0102324,STAR	CC27900286
001374	102316		
001375	100452		
001376	102324		
001377	100452		
001400	102240	,DATA ,0102240,STAR,0102323,STAR,0102325	CC28000287
001401	100452		
001402	102323		
001403	100452		
001404	102325		
001405	100452	,DATA ,STAR,0102320,STAR,0102320,STAR	CC28100288
001406	102320		
001407	100452		
001410	102320		
001411	100452		
001412	102322	,DATA ,0102322,STAR,0102305,STAR,0102323	CC28200289
001413	100452		
001414	102305		
001415	100452		
001416	102323		
001417	100452	,DATA ,STAR,0102323,STAR,0102311,STAR	CC28300290
001420	102323		
001421	100452		
001422	102311		
001423	100452		
001424	102317	,DATA ,0102317,STAR,0102316,STAR,0102240	CC28400291
001425	100452		
001426	102316		
001427	100452		
001430	102240		
001431	100452	,DATA ,STAR,0102324,STAR,0102305,STAR	CC28500292
001432	102324		
001433	100452		
001434	102305		
001435	100452		
001436	102323	,DATA ,0102323,STAR,0102324,STAR	CC28600293
001437	100452		
001440	102324		
001441	100452		
001442	102256	,DATA ,PERIOD+ECTX,STAR,0	CC28700294
001443	100452		

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001444	000000					
100452	STAR	.EQU	,0100452	* AND SOM		CC28800295
102000	EOTX	.EQU	,0102000			CC28900296
105215	CRLF	.EQU	,0105215			CC29000297
000256	PERICE	.EQU	,0256			CC29100298
	*					CC29300299
	*			PUNCH / READER TEST		CC29400300
	*					CC29500301
001445	006030	TPRT	.LDXI	,#DG7	33 OR 35 TTY ?	CC29600302
001446	002067 R		.CALL	,OUTD		CC29700303
001447	002000		.CALL	,INPG	INPUT TTY TYPE * END WITH PERICE	CC29800304
001450	003243 R		.JMP	,TATT	EXIT TO KEYBOARD CONTROL PROGRAM	CC29900305
001451	002000		.JMP	,*+2	*	CC30000306
001452	003143 R		.JMP	,TPRT	BACKSLASH	CC30100307
001453	001000					
001454	000537 R					
001455	001000					
001456	001457 R					
001457	001000					
001460	001445 R					
	*	NORMAL RETURN FROM INPG				
001461	006150		.ANAI	,04		CC30200308
001462	000004		.ERAI	,04		CC30300309
001463	006130		.JAZ	,*+4		CC30400310
001464	000004		.CRAI	,0377	33	CC30500311
001465	001010		.CRAI	,0224	35	CC30600312
001466	001471 R		.STA	,TYPE		CC30700313
001467	006110		.CALL	,UTC		CC30800314
001470	000377		.LDAI	,(TBTR)	INIT ERR TBL PTR	CC30900315
001471	006110					CC31000316
001472	000224					CC31100317
001473	052066					CC31200318
001474	002000					CC31300319
001475	003210 R					
001476	006010					
001477	003330 R					
001500	052561					
001501	002000 PR01		.CALL	,TTYC,0221	RDR ON	
001502	002551 R					
001503	000221					
001504	002000		.CALL	,TTYC,0222	PUNCH ON	
001505	002551 R					

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001506	000222					
001507	006020	LDBI	.100	PUNCH 100 BLANKS	CC31400320	
001510	000144					
001511	005001	TZA	*		CC31500321	
001512	002000	PR02	CALL	.OUTA	CC31600322	
001513	002613 R		DGR	*		
001514	005322		JZ	PR03	CC31700323	
001515	001020		JMP		CC31800324	
001516	001521 R					
001517	001000				CC31900325	
001520	001512 R					
		*			CC32000326	
		*	OPERATOR MUST INSERT LEADER. AND SET READER CONTROL TO RUN POSITION		CC32100327	
		*****			CC32200328	
		*			CC32300329	
001521	002000	PR03	CALL	.INPA	WAIT FOR OPERATOR TO INSERT LDR	CC32400330
001522	002610 R		JMP	.PRND	SS3 EXIT	CC32500331
001523	001000					
001524	002036 R		CALL	.TTYC,0223	TURN RDR OFF	CC32600332
001525	002000					
001526	002551 R		TZA	*		
001527	000223		STA	.PRW2	PRW2 =0 #CYC	CC32700333
001530	005001		STA	.PRW3	PRW3 =0 #ERR	CC32800334
001531	052557		STA	.PRW5	PRW5 =0 #PUNCH ON/OFF ERRORS	CC32900335
001532	052560		LDBI	.100	PUNCH LEADER	CC33000336
001533	052562					
001534	006020		CALL	.OUTA	PUNCH	CC33100337
001535	000144					
001536	002000		JSS3	.PRND	SS3 EXIT	CC33200338
001537	002613 R					
001540	001400		DECR CTR		CC33300339	
001541	002036 R		JZ	**+4	LAST CHAR ?	CC33400340
001542	005322		JMP	**-7	NO	CC33500341
001543	001020		LDAI	.0377	PUNCH RUBOUT	CC33600342
001544	001547 R					
001545	001000		CALL	.OUTA		CC33700343
001546	001536 R		TZA	*		
001547	006010				CC33800344	
001550	000377					
001551	002000				CC33900345	
001552	002613 R					
001553	005001					

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001554	001000		JMP	PR05	CC34000346
001555	001572 R		JBR	*	CC34100347
001556	005122	PR04	TBA	*	CC34200348
001557	005021		CALL	TPS4	CC34300349
001560	002000		JAZ	*+4	CC34400350
001561	001767 R		TBA	*	CC34500351
001562	001010		ANAI	.0377	CC34600352
001563	001556 R		TAB	*	CC34700353
001564	005021		JBZ	PR05	CC34800354
001565	006150		CALL	.OUTA	CC34900355
001566	000377		JSS3	PRND	CC35000356
001567	005012		JMP	PR04	CC35100357
001570	001020		CALL	.TTYC.0224	CC35200358
001571	001600 R	PR05	JSS3	PRND	CC35300359
001572	002000		JMP	PR04	CONTINUE
001573	002613 R		CALL	.TTYC.0224	PUNCH OFF
001574	001400		JSS3	PRND	TRY TO PUNCH RUBOUT
001575	002036 R		CALL	.TTYC.0222	PUNCH ON
001576	001000		JTA	*	PUNCH LEADER
001577	001556 R		LDBI	.100	DECR CTR
001600	002000	PR06	CALL	.OUTA	NO
001601	002551 R		JSS3	PRND	TURN PUNCH OFF
001602	000224		CALL	.TTYC.0377	
001603	002000		JTA	*	
001604	002551 R		LDBI	.100	
001605	000377		CALL	.TTYC.0224	
001606	002000		JSS3	PRND	
001607	002551 R		CALL	.TTYC.0222	
001610	000222		JTA	*	
001611	005001		LDBI	.100	
001612	006020		CALL	.OUTA	
001613	000144		JSS3	PRND	
001614	002000		CALL	.TTYC.0224	
001615	002613 R		JTA	*	
001616	001400		LDBI	.100	
001617	002036 R		CALL	.OUTA	
001620	005322		JSS3	PRND	
001621	001020		CALL	.TTYC.0224	
001622	001625 R		JTA	*	
001623	001000		LDBI	.100	
001624	001614 R		CALL	.OUTA	
001625	002000		JSS3	PRND	

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001626	002551	R				
001627	000224					
001630	002000		•CALL	•TTYC.0221	TURN RDR ON	•LOCKING FOR RLEOUT
001631	002551	R				
001632	000221					
001633	002000	PR07	•CALL	•INPA	INPUT CHAR	CC36400370
001634	002610	R				
001635	001000		•JMP	•PRND	SS3 EXIT	CC36500371
001636	002036	R				
001637	006130		•ERA1	•0377	A = 0377	CC36600372
001640	000377					
001641	001010		•JAZ	•*+4	YES	CC36700373
001642	001645	R				
001643	001000		•JMP	•PR07	NO	CC36800374
001644	001633	R				
001645	005004		•TZX	•	INIT TO EXPECTED CHAR	CC36900375
001646	002000	PR08	•CALL	•INPA	INPUT A CHARACTER	CC37000376
001647	002610	R				
001650	001000		•JMP	•PRND	SS3 EXIT	CC37100377
001651	002036	R				
001652	052556		•STA	•PRW1	SAVE	CC37200378
001653	005041		•TXA	•	COMPARE	CC37300379
001654	132556		•ERA	•PRW1	ARE EQUAL	CC37400380
001655	001010		•JAZ	•*+4	YES	CC37500381
001656	001661	R				
001657	002000		•CALL	•TTBL	NO	CC37600382
001660	002017	R				
001661	005144		•IXR	•	INC EXP TO NXT CHAR	CC37700383
001662	005041		•TXA	•		CC37800384
001663	002000		•CALL	•TPS4	CONTROL CHAR ?	CC37900385
001664	001767	R				
001665	001010		•JAZ	•*+4	YES	CC38000386
001666	001661	R				
001667	005041		•TXA	•	REMOVE HIGH ORDER	CC38100387
001670	006150		•ANAI	•0377	BITS	CC38200388
001671	000377					
001672	005014		•TAX	•	LAST CHAR?	CC38300389
001673	001040		•JXZ	•*+4	YES	CC38400390
001674	001677	R				
001675	001000		•JMP	•PR08	NO JUMP TO PR08	CC38500391
001676	001646	R				
001677	002000		•CALL	•INPA	INPUT CHAR FOR PUNCH ON/OFF	CC38600392

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001700	002610 R				
001701	001000	,JMP	,PRND	SS3 EXIT. TEST	CC38700393
001702	002036 R	,STA	,PRW1	SAVE CHAR	CC38800394
001703	052556	,CALL	,TTYC,0223	TURN RDR OFF	CC38900395
001704	002000				
001705	002551 R				
001706	000223				
001707	012556	,LDA	,PRW1	INPUT CHAR	CC39000396
001710	132066	,ERA	,TYPE	=TYPE	CC39100397
001711	001010	,JAZ	,PR10	YES	C CC39200398
001712	001731 R	,LDA	,TYPE	MOD=35	C CC39210399
001713	012066	,ERAI	,0224		C CC39220400
001714	006130				
001715	000224				
001716	001010	,JAZ	,PR09	YES,PUNCH OFF ERROR	C CC39230401
001717	001725 R	,LDA	,PRW1	TRY NEW TYPE MOD 33 (ACTS LIKE 35)	C CC39240402
001720	012556	,ERAI	,0224		C CC39250403
001721	006130				
001722	000224				
001723	001010	,JAZ	,PR11	YES,OK CHANGE TYPE = 35	C CC39260404
001724	001762 R				
001725	072556	PR09	,STX	,PRW1	C CC39300405
001726	002000	,CALL	,TTBL	PUT 0 INTO TBEL	CC39400406
001727	002017 R				
001730	042562	,INR	,PRW5	PUNCH ON/OFF CTR INC	CC39500407
001731	002000	PR10	,CALL	,CET	C CC39600408
001732	002415 R				
001733	001000	,JMP	,PRND	SS3 EXIT	CC39700409
001734	002036 R				
001735	006010	,LDIAI	,0377	PUNCH RUBOUT	CC39800410
001736	000377				
001737	002000	,CALL	,OUTA		CC39900411
001740	002613 R				
001741	002000	,CALL	,TTYC,0222	TURN PUNCH ON	CC40000412
001742	002551 R				
001743	000222				
001744	012066	,LDA	,TYPE		CC40100413
001745	006130	,ERAI	,0377		CC40200414
001746	000377				
001747	001010	,JAZ	,**+5		CC40300415
001750	001754 R				
001751	002000	,CALL	,TTYC,0377	PUNCH RUBOUT	CC40400416

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001752	002551	R				
001753	000377					
001754	001400		*JSS3	*PRND	SS3 EXIT	CC40500417
001755	002036	R	*TZA	*	JMP TO PUNCH PATTERN.	CC40600418
001756	005001		*TZA	*	(INIT)	CC40700419
001757	005002		*TZA	*		CC40800420
001760	001000		*JMP	*PR05	JMP TO READ ROUTINE	
001761	001572	R				
001762	006010	PR11	*LCAI	*0224	CHANGE TYPE = 35	C CC40810421
001763	000224					
001764	052066		*STA	*TYPE		C CC40820422
001765	001000		*JMP	*PR10		C CC40830423
001766	001731	R	*	CHECK FOR CONTROL CODE SUBROUTINE		
001767	000000	TPS4	*ENTR	*	CHECK A FOR CONTROL CHAR	CC40900424
001770	006110		*CRAI	*0200	A #0 IF YES	CC41000425
001771	000200					CC41100426
001772	006140		*SUBI	*0204		CC41200427
001773	000204		*SUBI	*010		CC41300428
001774	006140		*SUBI	*010		
001775	000010					CC41400429
001776	001010		*JAZ*	*TPS4		
001777	101767	R				
002000	006140		*SUBI	*05		CC41500430
002001	000005					
002002	001010		*JAZ*	*TPS4		CC41600431
002003	101767	R				
002004	005311		*DAR	*		CC41700432
002005	001010		*JAZ*	*TPS4		CC41800433
002006	101767	R				
002007	005311		*DAR	*		CC41900434
002010	001010		*JAZ*	*TPS4		CC42000435
002011	101767	R				
002012	005311		*DAR	*		CC42100436
002013	001010		*JAZ*	*TPS4		CC42200437
002014	101767	R				
002015	001000		*JMP*	*TPS4		CC42300438
002016	101767	R				
002017	000000	TTBL	*ENTR	*	X + ACT TO TBER	CC42400439
002020	072032		*STX	*TTS1+1		CC42500440
002021	005041		*TXA	*		CC42600441
002022	032561		*LDX	*PRW4		CC42700442

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002023	055000	,STA	,0,1	CC42800443		
002024	012556	,LDA	,PRW1	CC42900444		
002025	055001	,STA	,1,1	CC43000445		
002026	005144	,IXR	,	CC43100446		
002027	005144	,IXR	,	CC43200447		
002030	072561	,STX	,PRW4	CC43300448		
002031	006030	TT81	,LDXI	,0	CC43400449	
002032	000000					
002033	042560	,INR	,PRW3	CC43500450		
002034	001000	,JMP*	,TTBL	CC43600451		
002035	102017 R					
002036	002000	PRND	,CALL	,OUTC	OUTPUT #CYC,#ERR,#PUNCH ON/CFF ERRS	CC43700452
002037	003210 R		,CALL	,OUTC	CR/LF	CC43800453
002040	002000		,CALL	,OUTC		CC43900454
002041	003210 R		,CALL	,TTYC,0201	PRINT ENABLE	
002042	002000		,CALL	,OUTC		
002043	002551 R		,LDA	,PRW2	#CYC	CC44000455
002044	000201		,CALL	,OUTC		CC44100456
002045	012557		,LDA	,PRW2		
002046	002000		,CALL	,OUTC		
002047	003217 R		,CALL	,OUTC	CR/LF	CC44200457
002050	002000		,CALL	,OUTC		
002051	003210 R		,LDA	,PRW3	#ERR	CC44300458
002052	012560		,CALL	,OUTC		CC44400459
002053	002000		,CALL	,OUTC		
002054	003217 R		,CALL	,OUTC	CR/LF	CC44500460
002055	002000		,CALL	,OUTC		
002056	003210 R		,LDA	,PRW5	#PUNCH ON/CFF ERRS	CC44600461
002057	012562		,CALL	,OUTC		CC44700462
002060	002000		,CALL	,OUTC		
002061	003217 R		,CALL	,OUTC	CR/LF	CC44800463
002062	002000		,JMP	,TATT	EXIT TO KEYBOARD CCNTRCL PROGRAM	CC44900464
002063	003210 R					
002064	001000					
002065	000537 R					
002066	TYPE	,BSS	,1	TTY TYPE # STORAGE	CC45000465	
002067	106612	HDG7	,DATA	,0106612,*TYPE OF TTY (33 OR 35) *,0	CC45100466	
002070	152331					
002071	150305					
002072	120317					
002073	143240					
002074	152324					

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002075 154640
002076 124263
002077 131640
002100 147722
002101 120263
002102 132651
002103 120275
002104 000000
002105 106612 HDG8 ,DATA ,0106612,0106612,'EXPECTED ACTUAL',0

CC45200467

002106 106612
002107 142730
002110 150305
002111 141724
002112 142704
002113 120301
002114 141724
002115 152701
002116 146240
002117 000000

*

*

READER TEST

*

002120 002000 TRTT ,CALL ,TTYC,0224 INIT TTY PUNCH OFF

CC45400468

002121 002551 R

CC45500469

002122 000224

CC45600470

002123 002000 ,CALL ,TTYC,0204 *

CC45700471

002124 002551 R

002125 000204 ,CALL ,TTYC,0221 *

CC45800472

002126 002000 ,CALL ,TTYC,0221 *

002127 002551 R ,CALL ,TTYC,0221 *

CC45900473

002128 000221

002129 005004 ,TZX ,*

X = NXT CHAR EXPECTED

CC46000474

002130 072557 ,STX ,PRW2

INIT PWR2 #CYC

CC46100475

002131 072560 ,STX ,PRW3

PRW3 #ERR

CC46200476

002132 072562 ,STX ,PRW5

RDR CFF ERRORS

CC46300477

002133 072563 ,STX ,PRW6

RDR CN ERRORS

CC46400478

002134 006010 ,LDI ,*(TBER)

PRW4 TBL PTR

CC46500479

002135 003330 R

002136 052561 ,STA ,PRW4

CC46600480

002137 002000 TR00 ,CALL ,INPA

CC46700481

002138 002610 R ,JMP ,TATT

FIND FIRST BLANK

CC46800482

002139 001000 ,JMP ,TATT

EXIT TO KEYBOARD CCNTRCL PROGRAM

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002144	000537 R					
002145	001010	*JAZ	*+4	*		CC46900483
002146	002151 R	*JMP	*+6	*		CC47000484
002147	001000					
002150	002141 R					
002151	002000	TR01	*CALL	*INPA	INPUT CHAR	CC47100485
002152	002610 R		*JMP	*RTND	SS3 EXIT	CC47200486
002153	001000					
002154	002346 R					
002155	052556	*STA	*PRW1	SAVE IT		CC47300487
002156	005144	*IXR	*	INC EXPECTED CHAR		CC47400488
002157	005041	*TXA	*	*		CC47500489
002160	002000	*CALL	*TPS4	IS IT A CONTROL CHAR ?		CC47600490
002161	001767 R					
002162	001010	*JAZ	*+4	YES		CC47700491
002163	002156 R					
002164	005041	*TXA	*	NO		CC47800492
002165	006150	*ANAI	*0377	REMOVE ANY HIGH ORDER BITS		CC47900493
002166	000377					
002167	005014	*TAX	*	*		CC48000494
002170	001010	*JAZ	*TR02	LAST CHAR ? JMP TO ON/OFF TEST		CC48100495
002171	002201 R					
002172	132556	*ERA	*PRW1	EXP = ACT ?		CC48200496
002173	001010	*JAZ	*TR01	YES		CC48300497
002174	002151 R					
002175	002000	*CALL	*TTBL	NO ENTER ERR INTO TBL		CC48400498
002176	002017 R					
002177	001000	*JMP	*TR01			CC48500499
002200	002151 R					
002201	012556	TR02	*LDA	*PRW1	RDR ON/OFF TEST.	CC48600500
002202	001010	*JAZ	*+4	DID IT READ THE BLANK CK?		CC48700501
002203	002206 R					
002204	002000	*CALL	*TTBL	NO		CC48800502
002205	002017 R					
002206	006010	*LBAI	*0223	TURN RDR OFF		CC48900503
002207	000223					
002210	002000	*CALL	*OUTA	*		CC49000504
002211	002613 R					
002212	006020	*LDBI	*TRBF	B POINTS TO BUFFER		CC49100505
002213	002403 R					
002214	006030	*LEXI	*32000			CC49200506
002215	076400					

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002216	012644	.LDA	.STTY		CC49300507	
002217	006110	.CRAI	.0101200	ADJ. ITY DA	CC49400508	
002220	101200					
002221	052225	.STA	.TR03		CC49500509	
002222	006120	.ADDI	.01300		CC49600510	
002223	001300					
002224	052235	.STA	.TR04		CC49700511	
002225	101000	TR03	.SEN	.0,TR04	CC49800512	
002226	002235 R			READ REG RDY		
002227	002000	.CALL	.TOUT		CC49900513	
002230	003301 R	.JMP	.TR05		CC50000514	
002231	001000			EXIT		
002232	002242 R	.JMP	.TR03		CC50100515	
002233	001000			LOOP BACK		
002234	002225 R					
002235	102500	TR04	.CIA	.0	CC50200516	
002236	056000	.STA	.0,2	STORE CHAR INTO BFR	CC50300517	
002237	005122	.IBR	.	INCR BFR PTR	CC50400518	
002240	001000	.JMP	.TR03	CONTINUE INPUT	CC50500519	
002241	002225 R					
002242	005021	TR05	.TBA	.	CHECK # FRAMES READ	CC50600520
002243	006140	.SUBI	.(TRBF+2)	AFTER RDR TURNED OFF	CC50700521	
002244	002405 R					
002245	001004	.JAN	.TR07	LESS THAN 2	CC50800522	
002246	002334 R					
002247	006140	.SUBI	.2	OR	CC50900523	
002250	000002					
002251	001002	.JAP	.TR07	MORE THAN 3	CC51000524	
002252	002334 R					
002253	062274	.STB	.TR08+1	SAVE BFR PTR	CC51100525	
002254	005004	.T2X	.	X = EXP CHAR-1	CC51200526	
002255	006020	.LDI	.(TRBF)	B = BFR PTR	CC51300527	
002256	002403 R					
002257	016000	TR06	.LDA	.0,2	GET CHAR FROM BFR	CC51400528
002260	052556	.STA	.PRW1	PUT IT INTO ACT (PRW1)	CC51500529	
002261	005144	.IXR	.	INC EXP CHAR	CC51600530	
002262	072264	.STX	.*+2		CC51700531	
002263	006130	.ERA1	.0	ACT = EXP?	CC51800532	
002264	000000					
002265	001010	.JAZ	.*+4	YES	CC51900533	
002266	002271 R					
002267	002000	.CALL	.TTBL	NO	CC52000534	

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002270	002017	R					
002271	005122		,IBR	,	INC BFR PTR		CC52100535
002272	005021		,TBA	,	DONE ?		CC52200536
002273	006140	TR08	,SUBI	,0	*		CC52300537
002274	000000						
002275	001010		,JAZ	,*+4	YES		CC52400538
002276	002301	R	,JMP	,TR06	NO		CC52500539
002277	001000						
002300	002257	R	,CALL	,OET	OUTPUT ERR TBL		CC52600540
002301	002000		,JMP	,RTND	SS3 EXIT		CC52700541
002302	002415	R	,LDAI	,0221	TURN RDR ON		CC52800542
002303	001000		,CALL	,CUTA	*		CC52900543
002304	002346	R					
002305	006010		,CALL	,INPA	INPUT A CHAR		CC53000544
002306	000221		,JMP	,RTND	SS3 EXIT		CC53100545
002307	002000		,IXR	,	NEXT CHAR THE EXP?		CC53200546
002310	002613	R	,STX	,*+2			CC53300547
002311	002000		,SUBI	,0			CC53400548
002312	002610	R					
002313	001000		,JAZ	,TR01	JMP IF YES		CC53500549
002314	002346	R					
002315	005144		,INR	,PRW6	NC ,INC # RDR ON ERRORS		CC53600550
002323	042563		,LRLA	,9	INTO		CC53700551
002324	004251		,DEC R	,04	PUT EXP=-1,ACT=#FRAMES		CC53800552
002325	005304		,STA	,PRW1	ERROR TBL		CC53900553
002326	052556		,CALL	,TTBL			CC54000554
002327	002000						
002330	002017	R					
002331	005004		,TZX	,	LOOK FOR FIRST BLANK		CC54100555
002332	001000		,JMP	,TR00			CC54200556
002333	002141	R					
002334	005021	TR07	,TBA	,	PUT ERR FRAME		CC54300557
002335	006140		,SUBI	,(TRBF-1)	# INTO		CC54400558
002336	002402	R	,LRLA	,9			CC54500559
002337	004251		,STA	,PRW1	ERROR TABLE		CC54600560
002340	052556		,CALL	,TTBL	TO INDICATE		CC54700561
002341	002000						

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002342	002017	R						
002343	042562		,INR	,PRW5	INC # RDR OFF ERRORS		CC54800562	
002344	001000		,JMP	,TR06-4	RDR ON/OFF ERR		CC54900563	
002345	002253	R						
002346	002000	RTND	,CALL	,OUTC	OUTPUT		CC55000564	
002347	003210	R		,CALL	,TTYC,0201	PRINT ENABLE		CC55100565
002350	002000							
002351	002551	R						
002352	002001							
002353	002000		,CALL	,OUTC	CR/LF		CC55200566	
002354	003210	R						
002355	012557		,LDA	,PRW2	#CYC		CC55300567	
002356	002000		,CALL	,OUTE			CC55400568	
002357	003217	R		,CALL	,OUTC			
002360	002000						CC55500569	
002361	003210	R		,LDA	,PRW3	#ERR		
002362	012560			,CALL	,OUTE		CC55600570	
002363	002000						CC55700571	
002364	003217	R		,CALL	,OUTC	CR/LF		
002365	002000						CC55800572	
002366	003210	R		,LDA	,PRW5	# PUNCH ON/OFF OR RDR OFF ERRORS		
002367	012562			,CALL	,OUTE		CC55900573	
002370	002000						CC56000574	
002371	003217	R		,CALL	,OUTC	CR/LF		
002372	002000						CC56100575	
002373	003210	R		,LDA	,PRW6	O OR RDR CN ERRORS		
002374	012563			,CALL	,OUTE		CC56200576	
002375	002000						CC56300577	
002376	003217	R		,CALL	,OUTC	CR/LF		
002377	002000						CC56400578	
002400	003210	R		,JMP	,TATT	EXIT TO KEYBOARD CONTROL PROGRAM		
002401	001000						CC56500579	
002402	000537	R						
002403		TRBF	,BSS	,10			CC56600580	
002415	000000	OET	,ENTR	,	OUTPUT ERROR TABLE		CC56700581	
002416	052513		,STA	,CETS	SAVE REG A		CC56800582	
002417	062514		,STB	,CETS+1	B		CC56900583	
002420	072515		,STX	,CETS+2	X		CC57000584	
002421	042557		,INR	,PRW2			CC57100585	
002422	002000		,CALL	,TTYC,0201	PRINT ENABLE		CC57200586	
002423	002551	R						
002424	000201							

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002425	006010	.LCAI	.(TBER)	JMP IF	CC57300587
002426	003330 R	.SUB	.PRW4	NO ERRS	CC57400588
002427	142561	.JAZ	.OET5		CC57500589
002430	001010				
002431	002501 R	.JSS2	.OET2-2		CC57600590
002432	001200				
002433	002440 R	.LDXI	.HDG8	* YES	CC57700591
002434	006030	.CALL	.OUTD	* PRINT	CC57800592
002435	002105 R				
002436	002000	.LCAI	.(TBER)		CC57900593
002437	003243 R				
002440	006030	.LCAI	.(TBER)		CC58000594
002441	003330 R				
002442	001100 OET2	.JSS1	.OET3	SS1 BYPASS ERR HALT	CC58100595
002443	002447 R	.LDA	.0,1	A = DATA IN ERROR	CC58200596
002444	015000	.LDB	.1,1		CC58300597
002445	025001	.HLT	.0777	HLT TO DISPLAY ERR	CC58400598
002446	000777	.JSS2	.OET4	SS2 BYPASS ERR PRINTOUT	CC58500599
002447	001200 OET3				
002450	002467 R	.CALL	.OUTC	CR/LF	CC58600600
002451	002000				CC58700601
002452	003210 R	.LDA	.0,1		
002453	015000	.CALL	.OUTE		
002454	002000				
002455	003217 R	.TXB	.	PRINT 2 SPACES SAVE X	CC58800602
002456	005042	.LCAI	.0120240	PRINT	CC58900603
002457	006010				
002460	120240	.CALL	.OUTB	*	CC59000604
002461	002000				
002462	003175 R	.TBX	.	RETURN X	CC59100605
002463	005024	.LDA	.1,1		CC59200606
002464	015001	.CALL	.OUTE		CC59300607
002465	002000				
002466	003217 R				
002467	005144 OET4	.IXR	.	CONTINUE	CC59400608
002470	005144	.IXR	.		CC59500609
002471	005041	.TXA	.		CC59600610
002472	142561	.SUB	.PRW4		CC59700611
002473	001400	.JSS3	.(OET)*	SS3 EXIT	CC59800612
002474	102415 R				
002475	001010	.JAZ	.OET5	DONE	CC59900613
002476	002501 R				

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002477	001000		*JMP	*GET2		CC60000614	
002500	002442	R					
002501	006010	OETS	*LDIAI	*(TBER)	RESET TBL PTR	CC60100615	
002502	003330	R					
002503	052561		*STA	*PRW4		CC60200616	
002504	012513		*LDA	*GETS	RESTORE REG A	CC60300617	
002505	022514		*LDB	*GETS+1		CC60400618	
002506	032515		*LDX	*GETS+2		CC60500619	
002507	042415		*INR	*GET	SET RETURN	CC60600620	
002510	042415		*INR	*GET		CC60700621	
002511	001000		*JMP*	*GET		CC60800622	
002512	102415	R					
002513		OETS	*BSS	*3	SAVE REGS	CC60900623	
002516	000000	TTBC	*ENTR	*	CLEAR TTY RD BFR	CC61000624	
002517	012644		*LDA	*STTY	*	CC61100625	
002520	006110		*ORAI	*0102500	*	CC61200626	
002521	102500						
002522	052523		*STA	*+1	*	CC61300627	
002523	102500		*CIA	*0	*	CC61400628	
002524	001000		*JMP*	*TTBC	CLEAR BFR	CC61500629	
002525	102516	R			*	RETURN	
002526	052554	TTY1	*STA	*TTYC+3	SAVE A	CC61600630	
002527	072555		*STX	*TTYC+4	SAVE X	CC61700631	
002530	032551		*LDX	*TTYC	A=CONTROL	CC61800632	
002531	015000		*LDA	*0+1	CHARACTER	CC61900633	
002532	002000		*CALL	*OUTA	OUTPUT CHARACTER	CC62000634	
002533	002613	R					
002534	005004		*TZX	*	TIME DELAY	D CC62100635	
002535	002000		*CALL	*TDLY		D CC62150636	
002536	003304	R				D CC62200637	
002537	002000		*CALL	*TDLY		D CC62250638	
002540	003304	R				D CC62270639	
002541	002000		*CALL	*TDLY			
002542	003304	R					
002543	002000		*CALL	*TDLY			
002544	003304	R					
002545	042551		*INR	*TTYC	SET RETURN	CC62300640	
002546	012554		*LDA	*TTYC+3	RESTORE A	CC62400641	
002547	032555		*LDX	*TTYC+4	RESTORE X	CC62500642	
002550	001000		*JMP	*0	RETURN	CC62600643	
002551	000000		TTYC	*BES	*	ENTRY	CC62700644

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002552	001000	,JMP	,TTY1	LOOP	CC62800645	
002553	002526 R					
002554		,BSS	,2	STORAGE FOR A + X	CC62900646	
002556		PRW1	,BSS	,1	ACT	CC63000647
002557		PRW2	,BSS	,1	#CYC	CC63100648
002560		PRW3	,BSS	,1	#ERR	CC63200649
002561		PRW4	,BSS	,1	TBER PTR	CC63300650
002562		PRW5	,BSS	,1	#PUNCH ON/OFF OR RIBOFF ERRS	CC63400651
002563		PRW6	,BSS	,1	# RDR CN ERRS	CC63500652
002564			,BSS	,2	STORAGE FOR A + X	CC63600653
		*			CC63800654	
		*		INPUT ONE CHARACTER FROM TTY TO A REGISTER	CC63900655	
		*			CC64000656	
002566	012644	INA1	,LDA	,\$TTY	CC64100657	
002567	006110		,CRAI	,0101200	ADJUST TTY DA	CC64200658
002570	101200		,STA	,**+4		CC64300659
002571	052575		,ADDI	,001300		CC64400660
002572	006120		,STA	,**+8		CC64500661
002573	001300		,SEN	,0,**+7	READ REGISTER READY	CC64600662
002574	052604					
002575	101000		,MERG	,011	NOP	CC64700663
002576	002604 R		,JSS3*	,INPA	TERMINATE EXIT	CC64800664
002577	005011		,JMP	,**-5		CC64900665
002600	001400		,CIA	,0	INPUT CHARACTER	CC65000666
002601	102610 R		,INR	,INPA		CC65100667
002602	001000		,INR	,INPA		CC65200668
002603	002575 R		,JMP*	,0	EXIT	CC65300669
002604	102500		INPA	,BES		CC65400670
002605	042610			,JMP		CC65500671
002606	042610					CC65600672
002607	001000					CC65700673
002610	100000					CC65800674
002610						CC65900675
002611	001000					CC66000676
002612	002566 R					CC66100677
		*				CC66200678
		*		CUTPUT ONE CHARACTER FROM A REG TO TTY		
		*				
002613	000000	CUTA	,ENTR	,0		
002614	073312		,STX	,TS01	SAVE X	
002615	005014		,TAX	,		
002616	012644		,LDA	,\$TTY		

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002617	006110	,CRAI	,0101100	ADJUST TTY DA	CC66300679	
002620	101100					
002621	052630	,STA	,*+7		CC66400680	
002622	006120	,ADDI	,002000		CC66500681	
002623	002000					
002624	052640	,STA	,CUT1		CC66600682	
002625	005041	,TXA	,		CC66700683	
002626	006030	,LEXI.	,12000	TIME-OUT CONSTANT	CC66800684	
002627	027340					
002630	101000	,SEN	,0,CUT1	WRITE REGISTER READY	CC66900685	
002631	002640 R	,CALL	,TOUT		CC67000686	
002632	002000					
002633	003301 R	,MERG	,011		CC67100687	
002634	005011	,HLT	,77		CC67200688	
002635	000115	,JMP	,*-6		CC67300689	
002636	001000					
002637	002630 R	OUT1	,CAR	,0	CC67400690	
002640	103100	,LDX	,TS01	RESTORE X	CC67500691	
002641	033312	,JMP*	,OUTA	RETURN	CC67600692	
002642	001000					
002643	102613 R	STTY	,DATA	,01	CC67700693	
002644	000001	*			CC67800694	
		*		INPUT ONE CHARACTER + PRINT FROM TTY TO A REGISTER	CC67900695	
		*			CC68000696	
002645	002000	INB1	,CALL	,INPA	INPUT ONE CHARACTER	CC68100697
002646	002610 R					
002647	001000	,JMP*	,INPB	TERMINATE EXIT	CC68200698	
002650	102656 R					
002651	002000	,CALL	,OUTA	OUTPUT ONE CHARACTER	CC68300699	
002652	002613 R					
002653	042656	,INR	,INPB		CC68400700	
002654	042656	,INR	,INPB		CC68500701	
002655	001000	,JMP*	,0	EXIT	CC68600702	
002656	100000					
002656		INPB	,BES	,0	CC68700703	
002657	001000	,JMP	,INB1		CC68800704	
002660	002645 R	*				
		*		INPUT ONE CHARACTER (EDITED)	CC68900705	
		*			CC69000706	
002661	002000	INC3	,CALL	,INPB	CC69100707	
		*			CC69200708	

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002662	002656 R					CC69300709
002663	001000	JMP*	INPC	TERMINATE EXIT		
002664	102710 R	ERA1	\	BACKSLASH		CC69400710
002665	006130	JAZ	INC2	ABORT INPUT EXIT		CC69500711
002666	000334	ERA1	\	RESTORE A		CC69600712
002667	001010	JAZ	INC1	DELETE ONE CHARACTER EXIT		CC69800714
002670	002705 R	ERA1	\	RESTORE A		CC69900715
002671	006130	JAZ	0337	BACKARROW		CC69700713
002672	000334	ERA1				
002673	006130	JAZ	0337			
002674	000337	ERA1				
002675	001010	JAZ	INC1			
002676	002703 R	ERA1	0337			
002677	006130	JAZ	INC1			
002700	000337	INR	INPC			CC70000716
002701	042710	INR	INPC			CC7C100717
002702	042710	INR	INPC			CC7C200718
002703	042710 INC1	INR	INPC			CC7C300719
002704	042710	INR	INPC			CC7C400720
002705	042710 INC2	INR	INPC			CC7C500721
002706	042710	INR	INPC			CC7C600722
002707	001000	JMP*	0	EXIT		
002710	100000					
002710		INPC	BES	0		CC7C700723
002711	001000	JMP		INC3		CC7C800724
002712	002661 R	*	*	INPUT ONE ALPHA CHARACTER FROM TTY KEYBOARD TO A REG		
002713	001000	JMP	INPD+1	GET CORRECT INPUT		CC7C900725
002714	002747 R	IND4	CALL	INPUT ONE CHAR		CC71000726
002715	002000	JMP*	INPD	TERMINATE EXIT		CC71100727
002716	002710 R	JMP	IND2	ABORT INPUT EXIT		CC71200728
002717	001000	JMP	IND1	DELETE PREVIOUS CHARACTER EXIT		CC71300729
002720	102746 R	SUBI	0301	CHAR A		CC71400730
002721	001000	JAN	IND3	INVALID INPUT		CC71500731
002722	002743 R					CC71600732
002723	001000					CC71700733
002724	002741 R					CC71800734
002725	006140					
002726	000301					
002727	001004					

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002730	002751 R					
002731	006140	.SUBI	.032	CHAR Z	CC71900735	
002732	000032					
002733	001002	.JAP	.IND3	INVALID INPUT	CC72000736	
002734	002751 R					
002735	006120	.ADDI	.0333	RESTORE A	CC72100737	
002736	000333					
002737	042746	.INR	.INPD	NORMAL EXIT	CC72200738	
002740	042746	.INR	.INFD		CC72300739	
002741	042746 IND1	.INR	.INPD	DELETE PREVIOUS CHARACTER EXIT	CC72400740	
002742	042746	.INR	.INPD		CC72500741	
002743	042746 IND2	.INR	.INPD	ABORT INPUT EXIT	CC72600742	
002744	042746	.INR	.INPD		CC72700743	
002745	001000	.JMP*	.0	EXIT	CC72800744	
002746	100000					
002746		INPD	.BES	.0	CC72900745	
002747	001000	.JMP	.IND4		CC73000746	
002750	002715 R					
002751	002000	IND3	.CALL	.OUTG	INVALID INPUT--PRINT MESSAGE	CC73100747
002752	003052 R					
002753	001000	.JMP	.IND4		CC73200748	
002754	002715 R	*				
	*					
	*	INPUT TWO LETTER CHARACTERS FROM TTY				
	*					
002755	002000	INE3	.CALL	.INPD	INPUT ALPHA CHAR	CC73700753
002756	002746 R					
002757	001000	.JMP*	.INPE	TERMINATE EXIT	CC73800754	
002760	103007 R					
002761	001000	.JMP	.INE2	ABORT INPUT EXIT	CC73900755	
002762	003004 R					
002763	001000	.JMP	.INE1	DELETE PREVIOUS CHARACTER EXIT	CC74000756	
002764	003002 R					
002765	004250	.LRLA	.8		CC74100757	
002766	053313	.STA	.TS02		CC74200758	
002767	002000	.CALL	.INPD	INPUT ALPHA CHAR	CC74300759	
002770	002746 R					
002771	001000	.JMP*	.INPE	TERMINATE EXIT	CC74400760	
002772	103007 R					
002773	001000	.JMP	.INE2	ABORT INPUT EXIT	CC74500761	
002774	003004 R					

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002775	001000	•JMP	•INE1	DELETE PREVIOUS CHARACTER EXIT	CC74600762	
002776	003002 R					
002777	113313	•CRA	•TS02		CC74700763	
003000	043007	•INR	•INPE	NORMAL EXIT	CC74800764	
003001	043007	•INR	•INPE		CC74900765	
003002	043007	INE1	•INR	DELETE PREVIOUS CHARACTER EXIT	CC75000766	
003003	043007	•INR	•INPE		CC75100767	
003004	043007	INE2	•INR	ABORT INPUT EXIT	CC75200768	
003005	043007	•INR	•INPE		CC75300769	
003006	001000	•JMP*	•O	EXIT	CC75400770	
003007	100000					
003007		INPE	•BES	•O	CC75500771	
003010	001000	•JMP	•INE3		CC75600772	
003011	002755 R					
		*	INPUT PERIOD, COMMA FOR MESSAGE TERMINATOR			
		*				
003012	002000	INF6	•CALL	•INPC	INPUT ONE CHARACTER	CC75700773
003013	002710 R		•JMP*	•INPF	TERMINATE EXIT	CC75800774
003014	001000					CC75900775
003015	103047 R		•JMP	•INF2	ABORT INPUT EXIT	CC76000776
003016	001000		•JMP	•INF1	DELETE PREVIOUS CHARACTER EXIT	CC76100777
003017	003044 R		•JAZ	•INF3	COMMA EXIT	CC76200778
003020	001000		•SUBI	•0254	COMMA	CC76300779
003021	003042 R		•SUBI	•02	PERIOD	CC76400780
003022	006140		•JAZ	•INF4	PERIOD EXIT	CC76500781
003023	000254		•CALL	•OUTG	PRINT INVALID MESSAGE	CC76600782
003024	001010		•JMP	•INF5	GET CORRECT INPUT	CC76700783
003025	003040 R		•JAZ	•INF6		CC76800784
003026	006140		•JAZ	•INF7		CC76900785
003027	000002		•CALL	•OUTG		CC77000786
003030	001010		•JAZ	•INF8		CC77100787
003031	003036 R		•JAZ	•INF9		CC77200788
003032	002000		•JAZ	•INF10		CC77300789
003033	003052 R		•JAZ	•INF11		CC77400790
003034	001000		•JAZ	•INF12		
003035	003012 R		•JAZ	•INF13		
003036	043047	INF4	•INR	•INPF	NORMAL EXIT	
003037	043047	INF3	•INR	•INPF	COMMA EXIT	
003040	043047	INF1	•INR	•INPF	DELETE PREVIOUS CHARACTER EXIT	

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003043	043047	•INR	•INPF		CC77500791
003044	043047	INF2	•INR	•INPF	ABORT INPUT EXIT CC77600792
003045	043047		•INR	•INPF	CC77700793
003046	001000		•JMP*	•0	EXIT CC77800794
003047	100000				
003047		INPF	•BES	•0	CC77900795
003050	001000		•JMP	•INF5	CC78000796
003051	003012 R				
		*			CC78100797
		*	INVALID INPUT--PRINT MESSAGE		CC78200798
		*			CC78300799
003052	000000	OUTG	•ENTR	•0	CC78400800
003053	006030		•LDXI	•MSG5	INVALID MESSAGE CC78500801
003054	003321 R				
003055	002000		•CALL	•OUTD	OUTPUT MESSAGE CC78600802
003056	003243 R				
003057	001000		•JMP*	•OUTG	CC78700803
003060	103052 R				
		*			CC78800804
		*	INPUT OCTAL NUMBER FROM TTY KEYBOARD		CC78900805
		*	ASSEMBLE AS 16 BIT NUMBER IN A REG		CC79000806
		*	ONLY OCTAL NUMBERS ACCEPTED		CC79100807
		*			CC79200808
003061	005001	ING7	•TZA	•	CC79300809
003062	053313		•STA	•TS02	TEMP STORAGE FOR OCTAL NUMBER CC79400810
003063	053314		•STA	•TS03	CC79500811
003064	053315		•STA	•TS04	TEMP STORAGE FOR OCTAL NUMBER CC79600812
003065	063320		•STB	•TS07	CC79700813
003066	005002		•TZB	•	CC79800814
003067	002000	ING8	•CALL	•INPC	INPUT ONE CHARACTER CC79900815
003070	002710 R		•JMP*	•INPG	TERMINATE EXIT CC80000816
003071	001000				
003072	103143 R				
003073	001000		•JMP	•ING2	ABORT INPUT EXIT CC80100817
003074	003136 R		•JMP	•ING1	DELETE PREVIOUS CHARACTER EXIT CC80200818
003075	001000				
003076	003163 R				
003077	053316		•STA	•TS05	SAVE INPUT CC80300819
003100	006140		•SUBI	•0260	CC80400820
003101	000260				
003102	001004		•JAN	•ING6	INVALID IF NOT OCTAL NUMBER CC80500821
003103	003146 R				

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003104	006140	,SUBI	,010	CC80600822
003105	000010	,JAP	,ING6	INVALID IF NOT OCTAL NUMBER CC80700823
003106	001002	,AEDI	,010	RESTORE DIGIT CC80800824
003107	003146 R	,CRA	,TS02	CC80900825
003110	006120	,STA	,TS03	CC81000826
003111	000010	,LLRL	,3	CC81100827
003115	001020	,JBZ	,*4	CC81200828
003116	003121 R	,JMP	,ING8	CC81300829
003117	001000	,STA	,TS02	CC81400830
003120	003157 R	,INR	,TS04	ADVANCE DIGIT COUNTER CC81500831
003121	053313	,LDA	,TS04	CC81600832
003122	043315	,SUBI	,7	CC81700833
003123	013315	,JMP	,ING8	TOO MANY DIGITS. START INPUT OVER CC81800834
003124	006140	,STA	,TS02	GET NEXT DIGIT CC81900835
003125	000007	,INR	,INPG	NORMAL EXIT CC82000836
003126	001002	,INR	,INPG	CC82100837
003127	003157 R	,INR	,INPG	COMMA EXIT CC82200838
003128	001000	,INR	,INPG	ABORT INPUT EXIT CC82300839
003129	003067 R	,INR	,INPG	CC82400840
003132	043143	ING3	,INR	CC82500841
003133	043143	ING4	,INR	CC82600842
003134	043143	ING2	,INR	GET ASSEMBLED OCTAL NUMBER CC82700843
003135	043143	ING2	,INR	EXIT CC82800844
003136	043143	ING2	,INR	CC82900845
003137	043143	ING2	,INR	CC83000846
003140	023320	,LDB	,TS07	GET LAST INPUT IS IT A COMMA CC83100847
003141	013314	,LDA	,TS03	CC83200848
003142	001000	,JMP*	,0	YES CC83300849
003143	100000	INPG	,BES	IS IT A PERIOD CC83400850
003144	001000	,JMP	,ING7	
003145	003061 R	ING6	,LDA	
003146	013316	,SUBI	,TS05	
003147	006140	,SUBI	,0254	
003150	000254	,JAZ	,ING4	
003151	001010	,SUBI	,02	
003152	003134 R	,SUBI	,02	
003153	006140	,SUBI	,02	
003154	000002	,SUBI	,02	

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003155	001010	JAZ	•ING3	YES	CC83500851	
003156	003132 R					
003157	002000	ING8	•CALL	•OUTG	PRINT INVALID MESSAGE	CC83600852
003160	003052 R					
003161	001000		•JMP	•ING7	START OVER WITH OCTAL INFLT	CC83700853
003162	003061 R					
	*					
003163	013314	ING1	•LDA	•TS03	CC83800854	
003164	004343		•LSRA	•3	CC83900855	
003165	053314		•STA	•TS03	CC84000856	
003166	004243		•LRLA	•3	CC84100857	
003167	053313		•STA	•TS02	CC84200858	
003170	013315		•LDA	•TS04	CC84300859	
003171	005311		•DAR	•	CC84400860	
003172	053315		•STA	•TS04	CC84500861	
003173	001000		•JMP	•ING5	CC84600862	
003174	003067 R				CC84700863	
	*					
	*					
	*					
	*					
	*					
	*					
	*					
003175	000000	OUTB	•ENTR	•0	CC85000866	
003176	063317		•STB	•TS06	SAVE B	CC85100867
003177	004550		•LLSR	•8	CC85200868	
003200	002000		•CALL	•OUTA	OUTPUT FIRST CHAR	CC85300869
003201	002613 R		•LLRL	•8	CC85400870	
003202	004450		•CALL	•OUTA	OUTPUT SECOND CHAR	CC85500871
003203	002000		•LDB	•TS06	RESTORE B	CC85600872
003204	002613 R		•JMP*	•OUTB	RETURN	CC85700873
003205	023317					
003206	001000					
003207	103175 R					
	*					
	*					
	*					
	*					
	*					
003210	000000	OUTC	•ENTR	•0	CC86000876	
003211	006010		•LDIA	•0106612	CR AND LF	CC86100877
003212	106612					
003213	002000		•CALL	•OUTB	OUTPUT 2 CHAR	CC86200878
003214	003175 R		•JMP*	•OUTC	RETURN	CC86300879
003215	001000					
003216	103210 R					

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* * CLTPUT OCTAL WORD AND A SPACE TO TTY
* *
003217 000000 OUTE •ENTR •0
003220 005002 •T2B •
003221 004557 •LLSR •15
003222 005122 •IBR •
003223 006110 OUT2 •CRAI- •'0' MAKE DIGIT
003224 000260
003225 002000 •CALL •OUTA OUTPUT ONE DIGIT
003226 002613 R •TZA •
003227 005001 •LLRL •3
003230 004443 •JEZ •*+4 OCTAL OUTPUT COMPLETE
003231 001020
003232 003235 R
003233 001000 •JMP •OUT2
003234 003223 R •LDAI •0240 ASCII BLANK CODE
003235 006010
003236 000240
003237 002000 •CALL •OUTA OUTPUT SPACE
003240 002613 R
003241 001000 •JMP* •OUTE RETURN
003242 103217 R
* *
* * OUTPUT MESSAGE TO TTY (X REG CONTAINS ADDRESS OF MESSAGE)
* *
003243 000000 OUTD •ENTR •0
003244 015000 •LDA •0•1
003245 001010 •JAZ* •OUTD
003246 103243 R
003247 002000 •CALL •OUTB
003250 003175 R
003251 005144 •IXR •
003252 001000 •JMP •OUTD+1
003253 003244 R
* *
* * OUTPUT OCTAL MEMORY ADDRESS TO TTY PRINTER
* *
003254 000000 OUTF •ENTR •0
003255 053313 •STA •TS02 SAVE WORD
003256 006010 •LDAI •'*' PAREN SPACE
003257 124240
CC86700883
CC86800884
CC86900885
CC87000886
CC87100887
CC87200888
CC87300889
CC87400890
CC87500891
CC87600892
CC87700893
CC87800894
CC87900895
CC88000896
CC88100897
CC88200898
CC88300899
CC88400900
CC88500901
CC88600902
CC88700903
CC88800904
CC88900905
CC89000906
CC89100907
CC89200908
CC89300909
CC89400910
CC89500911
CC89600912
CC89700913

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003260	002000	,CALL	,OUTB	PRINT CHAR	CC89800914
003261	003175 R	,LEA	,TS02		CC89900915
003262	013313	,JMPM	,OUTE	OUTPUT OCTAL WORD	CC90000916
003263	002000	,LDIAI	,P)	RIGHT PARENTHESIS	CC90100917
003264	003217 R	,CALL	,OUTA	PRINT CHAR	CC90200918
003265	006010	,JMP*	,CUTF		CC90300919
003266	000251	*	*		CC90400920
003267	002000	*	*		CC90500921
003270	002613 R	*	*		CC90600922
003271	001000	*	*		CC90700923
003272	103254 R	*	*		CC90800924
		*	*		
		*	*		
		*	*		
003273	005344	TOU1	,DXR		CC90900925
003274	001040	,JXZ*	,TOUT	TIME-OUT RETURN	CC91000926
003275	103301 R	,INR	,TOUT		CC91100927
003276	043301	,INR	,TOLT	SET UP FOR	CC91200928
003277	043301	,JMP	,0	NORMAL EXIT	CC91300929
003300	001000				
003301	000000				
003301		TOUT	,BES	,0	
003302	001000	,JMP	,TCU1		
003303	003273 R				
		*	*		
		*	*		
		*	*		
		*	*		
003304	000000	TDLY	,ENTR	,0	CC91400930
003305	005344	,DXR	,		CC91500931
003306	001040	,JXZ*	,TDLY		CC91600932
003307	103304 R	,JMP	,*-3	RETURN	CC91700933
003310	001000				CC91800934
003311	003305 R				CC91900935
		*	*		
		*	*		
		*	*		
		*	*		
		*	*		
		*	*		
003312	000000	TS01	,DATA	,0	CC92100937
003313	000000	TS02	,DATA	,0	CC92200938
003314	000000	TS03	,DATA	,0	CC92300939
003315	000000	TS04	,DATA	,0	CC92400940
003316	000000	TS05	,DATA	,0	CC92500941
003317	000000	TS06	,DATA	,0	CC92600942
					CC92700943
					CC92800944
					CC92900945

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003320	000000	TS07	.DATA	.0	TEMPORARY STORAGE	CC93000946
*		*				CC93100947
		*			MESSAGE TABLE	CC93200948
		*				CC93300949
003321	120240	MSG5	.DATA	.* INVALID*,0106612, 0		CC93400950
003322	144716					
003323	153301					
003324	146311					
003325	142240					
003326	106612					
003327	000000					
003330		TBER	.BSS	.1	ERROR TABLE	CC93500951
	000500 R		.END	.TKCP		CC93600952

LITERALS

POINTERS

SYMBOLS

1	003330	R	TBER
1	003321	R	MSG5
1	003320	R	TS07
1	003317	R	TS06
1	003316	R	TS05
1	003315	R	TS04
1	003314	R	TS03
1	003313	R	TS02
1	003312	R	TS01
1	003304	R	TDLY
1	003301	R	TOUT
1	003273	R	TOU1
1	003254	R	OUTF
1	003243	R	OUTD
1	003223	R	OUT2
1	003217	R	OUTE
1	003210	R	OUTC
1	003175	R	OUTB
1	003163	R	ING1
1	003157	R	ING8
1	003146	R	ING6

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1	003143	R	INPG
1	003136	R	ING2
1	003134	R	ING4
1	003132	R	ING3
1	003067	R	ING5
1	003061	R	ING7
1	003052	R	OUTG
1	003047	R	INPF
1	003044	R	INF2
1	003042	R	INF1
1	003040	R	INF3
1	003036	R	INF4
1	003012	R	INF5
1	003007	R	INPE
1	003004	R	INE2
1	003002	R	INE1
1	002755	R	INE3
1	002751	R	IND3
1	002746	R	INPD
1	002743	R	IND2
1	002741	R	IND1
1	002715	R	IND4
1	002710	R	INPC
1	002705	R	INC2
1	002703	R	INC1
1	002661	R	INC3
1	002656	R	INPB
1	002645	R	INB1
1	002644	R	STTY
1	002640	R	OUT1
1	002613	R	OUTA
1	002610	R	INPA
1	002566	R	INA1
1	002563	R	PRW6
1	002562	R	PRW5
1	002561	R	PRW4
1	002560	R	PRW3
1	002557	R	PRW2
1	002556	R	PRW1
1	002551	R	TTYC
1	002526	R	TTY1
1	002516	R	TTBC

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1	002513	R	OETS
1	002501	R	OET5
1	002467	R	OET4
1	002447	R	OET3
1	002442	R	OET2
1	002415	R	OET
1	002403	R	TRBF
1	002346	R	RTND
1	002334	R	TR07
1	002273	R	TR08
1	002257	R	TR06
1	002242	R	TR05
1	002235	R	TR04
1	002225	R	TR03
1	002201	R	TR02
1	002151	R	TR01
1	002141	R	TR00
1	002120	R	TRTT
1	002105	R	HDG8
1	002067	R	HDG7
1	002066	R	TYPE
1	002036	R	PRND
1	002031	R	TTS1
1	002017	R	TTBL
1	001767	R	TPS4
1	001762	R	PR11
1	001731	R	PR10
1	001725	R	PR09
1	001646	R	PR08
1	001633	R	PR07
1	001600	R	PR06
1	001572	R	PR05
1	001556	R	PR04
1	001521	R	PR03
1	001512	R	PR02
0	001501	R	PR01
1	001445	R	TPRT
1	000256		PERI
1	105215		CRLF
1	102000		EOTX
1	100452		STAR
1	001345	R	PST6

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1	001330	R	PS20
1	001326	R	TPST
1	001325	R	TPW1
1	001307	R	TPT3
1	001274	R	TPT2
1	001264	R	TPT1
1	001261	R	TPTT
1	001245	R	HDG6
1	001233	R	JKET
1	001232	R	TKW2
1	001231	R	TKW1
1	001202	R	TKK2
1	001126	R	TKK1
1	001121	R	CS01
1	001071	R	TCS1
0	001055	R	TKC6
1	001053	R	TKC5
1	001041	R	TKC4
0	001025	R	TKC3
1	001023	R	TKC2
1	001011	R	TKCT
1	001010	R	STID
1	001007	R	RT
1	001006	R	PT
1	001005	R	PS
1	001004	R	PR
1	001003	R	KE
1	001002	R	KC
1	000762	R	HDG5
1	000743	R	HDG4
1	000726	R	HDG3
1	000716	R	HDG2
1	000675	R	HDG1
1	000665	R	TRSS
1	000655	R	TSSR
0	000572	R	TIID
1	000566	R	TRID
1	000537	R	TATT
0	000524	R	TIDA
1	000520	R	TRDA
0	000514	R	TTPI
1	000500	R	TKCP

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1 000416 IOCT
1 000403 OUMG
1 000400 OU1C